

CAMP MACKALL WATER SYSTEM

NC 03-63-617



2015 WATER QUALITY REPORT



Old North
Utility Services, Inc.

A Subsidiary of American States Utility Services, Inc.

**Our Mission: Serving Those Who
Serve™**

Protecting and Preserving Your Drinking Water

We are pleased to present the following Camp Mackall 2015 Water Quality Report, which contains information about testing completed in your water system through December 2015.

Old North Utility Services, Inc. (ONUS) takes seriously its job as the guardian of drinking water quality for its customers. ONUS is regulated by the state and federal government.

ONUS works with the City of Southern Pines, NC to ensure you receive water that meets regulatory requirements. Each week, industry professionals take water samples to monitor quality at approved sites throughout the distribution system. If there is an exceedance of a drinking water standard, we are required to notify you quickly and take action to restore normal service.

We pride ourselves on our strong customer service culture that comes from industry knowledge and relationships built in the water industry. Our representatives are available around the clock to answer questions and address any water concerns day or night.

On behalf of all of us at Old North Utility Services, Inc., thank you for providing us the opportunity to serve you. If you have any questions about this report, please call the ONUS office at (910) 495-1311.

Sincerely,

Robert Sprowls
President and Chief Executive Officer
American States Water Company

Susan Miller
Utility Manager
Old North Utility Services

About the Company

American States Water Company is an investor-owned utility publicly traded on the New York Stock Exchange under the trading symbol AWR and is the parent company of American States Utility Services (ASUS). ASUS is one of the leaders in privatization of utilities on military installations across the nation. Through its subsidiary, Old North Utility Services, Inc (ONUS), the important responsibility of managing the water systems at Camp Mackall is accomplished.

AWR and its family of companies provide water to communities throughout the United States. For more than 80 years, we've been installing and maintaining complex structures consisting of thousands of miles of pipelines, wells, pumping stations and reservoirs. With AWR companies, you can count on reliable water services, quality drinking water, and unsurpassed response to your questions.

You can find our companies in California, Maryland, New Mexico, North Carolina, South Carolina, Texas and Virginia. Our trained personnel have thousands of years of combined experience and are certified to work the various aspects of water systems. Our water testing procedures allow us to meet or exceed the water quality regulations set in place by the US Environmental Protection Agency (USEPA) and the North Carolina Department of Environment and Natural Resources (NCDENR) to deliver quality, wholesome water to you – our customers.

Managing the daily operations for ONUS is Brannon Richards, Utility Manager. Brannon is a seasoned professional in the water industry and a Registered Professional Engineer (PE) in the state of North Carolina.

All the men and women at ONUS are committed to meeting the needs of Camp Mackall. We're here to give you peace of mind, water when you need it, and unsurpassed service. For questions on your water service, please contact Amanda Owens, Environmental Health and Safety Supervisor at (910) 495-1311.

Our Subsidiaries



Fort Bliss
Water Services Company
A Subsidiary of American States Utility Services, Inc.

**Serving Fort Bliss and Biggs Army
Air Field, Texas**



Terrapin
Utility Services, Inc.
A Subsidiary of American States Utility Services, Inc.

Serving Andrews Air Force Base, Maryland



Old Dominion
Utility Services, Inc.
A Subsidiary of American States Utility Services, Inc.

**Serving Fort Eustis, Fort Monroe, Fort
Story, and Fort Lee, Virginia**



Palmetto State
Utility Services, Inc.
A Subsidiary of American States Utility Services, Inc.

Serving Fort Jackson, South Carolina



Old North
UTILITY SERVICES, INC.
A Subsidiary of American States Utility Services, Inc.

**Serving Fort Bragg, Pope Army Air Field,
and Camp Mackall, North Carolina**

Safekeeping of Water Supplies and Facilities

To reduce the risk of terrorism affecting local water supplies and distribution systems, Old North Utility Services, Inc. is following recommendations from the Federal Bureau of Investigation, the United States Environmental Protection Agency and the American Water Works Association. While water systems have a low relative likelihood of experiencing terrorist acts, these agencies advise that water systems should guard against unplanned physical intrusion, review emergency response plans, and increase vigilance. Old North Utility Services, Inc. has taken all these steps and is continuing to look for additional safety improvements.

If You Have Questions – Contact Us

For information about your water quality, please contact Lisanne Dorsch, Environmental Health & Safety Coordinator, at (910) 495-1311.

Information Statement from EPA on Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Old North Utility Services, Inc. is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using the water for drinking or cooking. If you are concerned about the lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Source Water Assessment Program (SWAP) Results

The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information and a relative susceptibility rating of Higher, Moderate or Lower.

The relative susceptibility rating of each source for Old North Utility Services, Inc.-Camp MacKall was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area.). The assessment findings are summarized in the following table:

[Susceptibility of Sources to Potential Contaminant Sources \(PCSs\)](#)

Source Name	Susceptibility Rating	SWAP Report Date
Town of Southern Pines-Drowning Creek	Moderate	July 10, 2015

The complete SWAP Assessment report for Old North Utility Services, Inc.-Camp MacCall may be viewed on the Web at: <http://www.ncwater.org/pws/swap>. Please note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this web site may differ from the results that were available at the time this CCR was prepared. To obtain a printed copy of this report, please mail a written request to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh NC 27699-1634, or email request to swap@ncmail.net. Please indicate your system name, PWSID, and provide your name, mailing address and phone number. If you have any questions about the SWAP report please contact the Source Water Assessment staff by phone at 919-715-2633. It is important to understand that a susceptibility rating of “higher” does not imply poor water quality, only the systems’ potential to become contaminated by PCS’s in the assessment area.

Risk to Tap and Bottled Water

To ensure that tap water is safe to drink, the U.S.EPA prescribes regulations limiting the amount of certain contaminants in water provided by public Water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff ,and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA’s Safe Drinking Water Hotline at (800) 426-4791.

Tap vs. Bottled

Thanks in part to aggressive marketing; the bottled water industry has successfully convinced us all that water purchased in bottles is healthier alternative to tap water. However, according to a four-year study conducted by the National Resources Defense Council, bottled water is not necessarily cleaner or safer than most tap water. In fact, about 25 percent of bottled water is actually just bottled tap water (40 percent according to government estimates).

The Food and Drug Administration is responsible for regulating bottled water, but these rules allow for less rigorous testing and purity standards than those required by the U.S. EPA for community tap water. For instance, the high mineral content for some bottled waters makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that is packaged and sold within the same state, which accounts for about 70 percent of all bottled water sold in the United States.

People spend 10,000 times more per gallon for bottled water than they typically do for tap water. If you get your recommended eight glasses a day from bottled water, you could be spending up to \$1,400 annually. That same amount of tap water would cost about 49 cents. Even if you installed a filter device on your tap, your annual expenditure would be far less than what you would pay for bottled water.

For a detailed discussion on the NRDC study results, check out their web site at www.nrdc.org/water/drinking/bw/exesum.asp.

Definitions

Maximum Contaminant Level (MCL)

The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the maximum contaminant level goals as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG)

The level of contaminant in drinking water below which there is no known or expected risk to health. Maximum contaminant level goals are set by EPA. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL)

The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG)

The level of a disinfectant added for water treatment below which there is no known or expected health risk. MRDLGs are set by EPA. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Primary Drinking Water Standard (PDWS)

MCLs for contaminants that affect health, along with their monitoring and reporting requirements, and water treatment requirements.

Action Level (AL)

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT)

A required process intended to reduce the level of a contaminant in drinking water.

Sample Results

Regulated Contaminants

Regulated Contaminants				Old North Utility Service		Southern Pines WTP		Violation	Typical Source
Substance (Unit of Measurement)	Year Sampled	MCL [MRDL]	MCLG	Amount Detected	Range Low-High	Amount Detected	Range Low-High		
Turbidity, NTU	2015	TT = 1 NTU	N/A	N/A	N/A	0.14	0.04-0.14	N	Soil runoff
Turbidity, Lowest %	2015	TT = % of samples <0.3 NTU	N/A	N/A	N/A	100%	N/A	N	Soil runoff
Fluoride	2015	4	4	N/A	N/A	1.1	.4 - 1.10	N	Water additive which promotes strong teeth.
Lead, mg/L	2015	AL = .015	0	<0.003	0	.004 90th Percentile	0.007<0.003	N	Corrosion of internal/household plumbing; erosion of natural deposits
Copper, mg/L	2015	AL = 1.3	1.3	0.427	0.640<0.050	.109 90th Percentile	0.273<0.050	N	Corrosion of internal/household plumbing; erosion of natural deposits
Total Organic Carbon (TOC) - Raw Water, mg/L	2014	TT	N/A	N/A	N/A	8.7	6.1 - 8.7	N	Naturally present in the environment
Total Organic Carbon (TOC) - Treated Water, mg/L	2015	TT	N/A	N/A	N/A	1.26*	1.01 - 1.48	N	Naturally present in the environment
TOC Removal Rate	2014	>1.0	N/A	N/A	N/A	1.34	0.87 - 1.46	N	
Chlorine, mg/L	2015	4	4	1.68**	.74 - 2.70	2.38	1.6 - 2.38	N	Water additive to control microbes
MonoChloramines, mg/L	2015	4	4	1.57**	.56 - 3.12			N	Water additive to control microbes

Unregulated Contaminants

Unregulated Contaminants									
Chloroform, mg/L	2013	0.08	N/A	N/A	N/A	0.027	0.027	N	By product of water chlorination
Chromium, ppb	2013-2014	N/A	N/A	N/A	N/A	0.55-0.39	0.4	N	Naturally present in the environment
Strontium, ppb	2013-2014	N/A	N/A	N/A	N/A	16.5-13.1	14.7	N	Naturally present in the environment; chemical use
Vanadium, ppb	2013-2014	N/A	N/A	N/A	N/A	0.21-0.08	0.16	N	Naturally present in the environment; used as chemical catalyst
Hexavalent Chromium, ppb	2013 - 2014	N/A	N/A	N/A	N/A	0.18-0.010	0.14	N	Naturally occurring element, used in chemical processes
Hexachlorocyclo-pentadiene, ppb	2015	50	50	N/A	N/A	0.114	<0.1 - 0.114	N	Discharge from chemical factories
TTHM B01 ppb	2015	80	N/A	16.9*	14.4 - 19.4	26.0*	50.0 - 13.0	N	By Product of water chlorination
TTHM B02 ppb	2015	80	N/A			30.8*	64.0 - 18.0	N	By Product of water chlorination
TTHM B03ppb	2015	80	N/A			33*	64.0 - 17.0	N	By Product of water chlorination
TTHM B04 ppb	2015	80	N/A			36*	64.0 - 24.0	N	By Product of water chlorination
HAA5 B01 ppb	2015	60	N/A	27.3*	36.6 - 18.0	47.6*	79.1 - 39.7	N	By Product of water chlorination
HAA5 B02 ppb	2015	60	N/A			33.3*	49.5 - 33.3	N	By Product of water chlorination
HAA5 B03 ppb	2015	60	N/A			36.9*	49.3 - 22.5	N	By Product of water chlorination
HAA5 B04 ppb	2015	60	N/A			28.6*	47.2 - 2.0	N	By Product of water chlorination

* - Locational Running Annual Average (LRAA)

** - Running Annual Average (RAA)

Measurements

Water is sampled and tested throughout the year.

Contaminants are measured in:

- Parts per million (ppm) or milligrams per liter (mg/L),
- Parts per billion (ppb) or micrograms per liter ($\mu\text{g/L}$),
- Parts per trillion (ppt) or nanograms per liter (ng/L).
- Grains per gallon (grains/gal) – A measurement of water hardness often used for sizing household water softeners. One grain per gallon is equal to 17.1 mg/L of hardness.
- Nephelometric Turbidity Units (NTU) – A measurement of the clarity of water. Turbidity in excess of 5 NTU is noticeable to the average person.
- Picocuries per liter (pCi/L) – A measurement of radioactivity in water.

If this is difficult to imagine, think about these comparisons:

Parts per **million**:

3 drops in 42 gallons
1 second in 12 days
1 inch in 16 miles



Parts per **billion**:

1 drop in 14,000 gallons
1 second in 32 years
1 inch in 16,000 miles



Parts per **trillion**:

10 drops in enough water to fill the Rose Bowl
1 second in 32,000 years
1 inch in 16 million miles



For Systems

Some people may be more vulnerable to constituents in the water than the general population. Immuno-compromised people, such as those with cancer undergoing chemotherapy, persons who have had organ transplants, people with HIV/AIDS or other immune system disorders, some elderly persons and infants can be particularly at risk of infections. These people should seek advice about drinking water from their healthcare providers. The EPA and the Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the EPA's safe drinking water hotline at 1-800-426-4791.

Sample Reporting

This report is a summary of the quality of the water we provide our customers. The analysis was made using data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the included pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

Although all the substances listed here are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of the substance is present in the water. Compliance (unless otherwise noted) is based on the average level of concentration being below the MCL. The State allows us to monitor for some contaminants less than once per year because the concentrations do not change frequently. Some of our data, though representative, are more than a year old.

Lead and Copper

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service line and home plumbing. The Washington Suburban Sanitary Commission is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking.

If you are concerned about the lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.